

## **BUILDING DIVISION**

## **PLAN CHECK NOTE**

From: Building Plan Check

PCN #21

Effective: 9-23-2008

Revised: 9-26-2008

**Subject:** Fire protection requirements for buildings containing courts

**Reference:** CBC 702, 704.3, 705.5.1, 1024.3, 1024.5.2, 1020.1.4, and ICC300 310.2

**Purpose:** To provide direction to architects and plan review staff regarding construction requirements for buildings containing courts bounded by at least two walls.

### **Background:**

Section 704.3 specifies that an imaginary line must be located when there is more than one building on the same lot, unless they can be analyzed as one building. For definition purposes we use the term "assumed property line" in lieu of "imaginary line". There is no code section that requires that an assumed property line be placed within a court formed by the same building.

Several code sections, all related to exiting, have specific minimum dimensions as follows:

- a. Bleachers to an adjacent building, 10'. ICC300-2007 310.2.
- b. Exterior balconies, stairways, and ramps, 10'. CBC 1024.3.
- c. Exit enclosure walls to unprotected openings, 10'. CBC 1020.1.4
- d. Egress courts, 10' min, CBC 1024.5.2

### **Findings:**

The code assumes the safety of exiting components will be tenable from smoke by requiring a 10' distance. This will provide the time needed for the occupants to safely exit the building. To minimize the conflagration hazard, the code provides specific requirements. Where the code is silent, the following shall apply.

1. Where the occupancies at both side of the court are required to be separated per CBC 508 or per CBC 402, an assumed property line is required to determine the fire separation distance. Exterior wall construction and opening protection shall be determined per section 602 and 704.8 based on the fire separation distance to this assumed property line. The rating can be provided on one or both walls, and need not exceed the separation required per table 508.3.3.

2. Where a Fire Wall per section 705 is provided, an assumed property line shall connect and extend outward only for the purposes of determining the maximum opening area per 704.8 within the 4' area of 705.5.1. Use of the assumed property lines for both wall and window areas could be used as part of an AMMC application.
3. Where exception 4 to 1023.6 is used, the opening required by item 4.4 shall not be open to more than the upper most two floors. Any opening through additional floors shall require a smoke tenability study. Other openings to this open area are generally not allowed; however, an AMMC can be submitted for review by the committee on a case by case basis for court sizes significantly larger than those required by item 4.4.
4. Where an exterior exit (exterior stair, exterior ramp, egress balcony, or opening in a corridor) is located less than 10' to the wall of the same building as may occur in a court, the exterior walls shall be at least 1-hour fire rated construction and the openings shall be  $\frac{3}{4}$  hour rated. Additionally, when the path of egress continues from an exterior exit through an exit court of a width less than 10' wide, the wall construction and opening protectives shall be based on section 1024.5.2.
5. The width of courts used for exit components shall be wide enough to prevent the accumulation of smoke. As a minimum, they must be wide enough to meet section 1206.3. For courts over 6 stories tall bounded on all sides, a smoke tenability study is required to show that stratification will not occur.

**For questions or comments about any of the above items please contact your Plan Check Engineer.**